

Public Notice Beginning Date: **February 6, 2015**

Public Notice Ending Date: **March 9, 2015**

National Pollutant Discharge Elimination System (NPDES)
Permit Program

Draft Reissued NPDES Permit to Discharge into Waters of the State

Public Notice/Fact Sheet Issued By:

Illinois EPA
Bureau of Water,
Division of Water Pollution Control
Permit Section
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-0610

Name and Address of Discharger:

Lafarge Midwest, Inc.
2500 Portland Road
Grand Chain, Illinois 62941

Name and Address of Facility:

Lafarge Midwest, Inc.
County Line Roads 1000N and 300E
Joppa, Illinois 62953
(Massac County)

The Illinois Environmental Protection Agency (IEPA) has made a tentative determination to issue a NPDES Permit to discharge into the waters of the state and has prepared a draft Permit and associated fact sheet for the above named discharger. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice/Fact Sheet. The last day comments will be received will be on the Public Notice period ending date unless a commentor demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the draft permit to the IEPA at the above address. Commentors shall provide his or her name and address and the nature of the issues proposed to be raised and the evidence proposed to be presented with regards to those issues. Commentors may include a request for public hearing. Persons submitting comments and/or requests for public hearing shall also send a copy of such comments or requests to the permit applicant. The NPDES permit and notice number(s) must appear on each comment page.

The application, engineer's review notes including load limit calculations, Public Notice/Fact Sheet, draft permit, comments received, and other documents are available for inspection and may be copied at the IEPA between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the draft permit, the permitting authority may, at its discretion, hold a public hearing. Public notice will be given 45 days before any public hearing. Response to comments will be provided when the final permit is issued. For further information, please call Brian W. Cox at 217/782-0610.

The applicant is engaged in the manufacturing of Portland cements and cement-based products using the "long dry" cement kiln process (SIC 3241). There are two kilns located on-site and two raw mills. The facility is capable of producing approximately 5,556 tons of cementitious products per day when operating at the plant's maximum capacity. Currently the annual production estimates for the facility are 1,160,000 tons of cement. Waste water is generated from cooling of processing equipment, equipment wash water, treated sanitary wastewater, stormwater runoff including storage pile runoff, and air conditioner and chiller condensate. Plant operation results in an average discharge of 0.135 MGD of non-contact cooling water, cooling tower blowdown, and equipment wash water from internal outfall A01, discharges from internal outfall A01, and intermittent discharges of stormwater runoff including storage pile runoff from outfall 001, an average discharge of 0.022 MGD of air conditioner and chiller condensate and treated sanitary wastewater from outfall 002, an intermittent discharge of stormwater including storage pile runoff from outfalls 003, 005, and 013, and an average discharge of 0.216 MGD of pump cooling/sealant water from outfall 014.

Treatment for sanitary wastewater is conducted in the on-site treatment system permitted under IEPA construction permit number 2005-EN-3317. The treatment system consists of a 4,500 gallon septic tank and 32' x 32' recirculating sand filter, with chlorination and dechlorination.

Additionally, stormwater runoff and storage pile runoff are collected in settling ponds and may utilize chemical addition for neutralization prior to discharging to outfalls 001,003, 005, and 013.

The following modifications are proposed:

Internal Outfall A01 has been created as a means of showing compliance with the 40 CFR 411.17 production based standard for TSS. The non-contact cooling water in the nonleaching subcategory is considered process wastewater. Therefore, the 40 CFR 411.17 requirements should have been applied in the past but were not. The production based load limit should not be applied to the storage pile runoff and stormwater runoff which also discharge from outfall 001. Therefore, Outfall A01 will allow for the sum of the mass of total suspended solids (TSS) contributed from all process waste streams (i.e. discharges of non-contact cooling water, cooling tower blowdown, and equipment wash water) to be reported separately from TSS contributions from the stormwater and storage pile runoff. The concentration based TSS limit will be applied at Outfall 001 after the waste streams have been commingled to ensure the storage pile runoff is also in compliance with the appropriate TSS standards.

The TSS concentration limitations for outfalls 001, 003, 005, and 013 have been updated to reflect the TSS standard found at Title 35 Ill. Adm. Code 304.124 which is more stringent than the TSS standard found for storage pile runoff at Title 40 CFR 411.32.

Additionally, TSS and BOD₅ limitations have been changed and *E. Coli* limitations have been added to Outfall 002 to reflect the updated ORSANCO standards for sewage discharges.

Application is made for existing discharge(s) which are located in Massac County, Illinois. The following information identifies the discharge point, receiving stream and stream classifications:

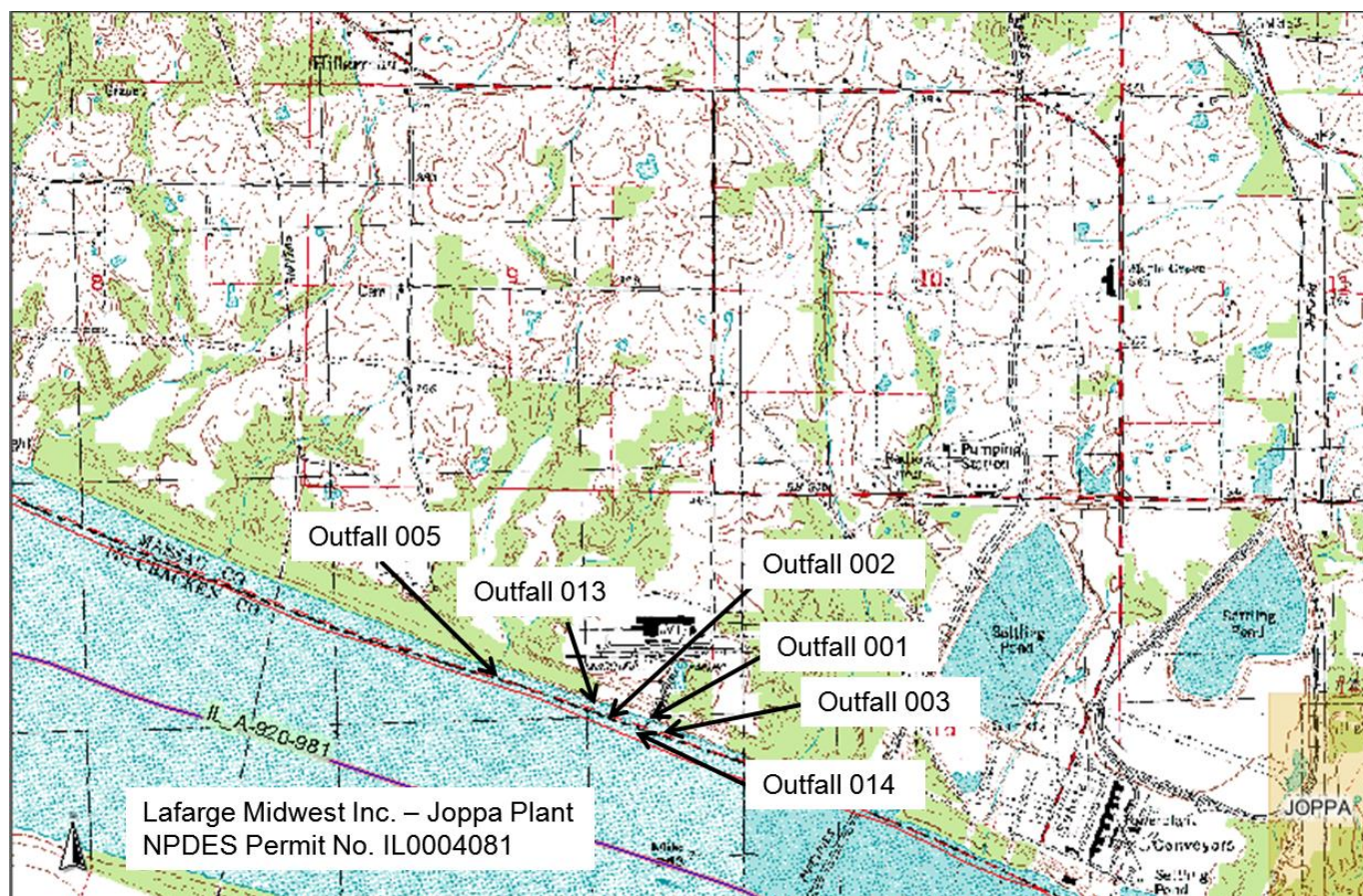
| Outfall | Receiving Stream | Latitude | | Longitude | | Stream Classification | Biological Stream Characterization |
|---------|------------------|-------------|-------|-------------|------|-----------------------|------------------------------------|
| 001 | Ohio River | 37° 12' 52" | North | 88° 52' 41" | West | General Use | Not Rated |
| 002 | Ohio River | 37° 12' 54" | North | 88° 52' 51" | West | General Use | Not Rated |
| 003 | Ohio River | 37° 12' 53" | North | 88° 52' 36" | West | General Use | Not Rated |
| 005 | Ohio River | 37° 13' 09" | North | 88° 52' 49" | West | General Use | Not Rated |
| 013 | Ohio River | 37° 12' 54" | North | 88° 52' 51" | West | General Use | Not Rated |
| 014 | Ohio River | 37° 12' 45" | North | 88° 52' 46" | West | General Use | Not Rated |

To assist you further in identifying the location of the discharge please see the attached map.

The stream segment, IL_A-920-981 receiving the discharge from outfall(s) 001, 002,003, 005, 013, and 014 is on the 2012 303(d) list of impaired waters, and was not provided a Biological Stream Characterization rating in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*.

The following parameters have been identified as the pollutants causing impairment:

| Pollutants | Impaired Use |
|---|----------------------------|
| Dioxin (including 2,3,7,8-TCDD), PCBs and mercury | Fish Consumption Use |
| Fecal Coliform | Primary Contact Recreation |



The discharge(s) from the facility shall be monitored and limited at all times as follows:

Outfalls: 001

| | LOAD LIMITS lbs/day DAF (DMF) | | | CONCENTRATION LIMITS mg/l | | |
|-------------------------|----------------------------------|------------------|------------|---|------------------|----------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Monitor Only | | |
| pH | | | | Shall be within the range of 6 -9 s.u. | | 35 IAC 304.125 and 40 CFR 411 |
| Temperature | | | | Monitor Only | | 35 IAC 309.146 |
| Total Suspended Solids | | | | 15 | 30 | 35 IAC 304.124 |
| Total Residual Chlorine | | | | | 0.05 | |
| Total Dissolved Solids | | | | Monitor Only | | |
| Sulfate | | | | Monitor Only | | |
| Chloride | | | | Monitor Only | | |

Outfalls: A01

| | LOAD LIMITS lbs/day DAF (DMF) | | | CONCENTRATION LIMITS mg/l | | |
|------------------------|----------------------------------|------------------|---------------|------------------------------|------------------|------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Monitor Only | | |
| Total Suspended Solids | | 31.8 | 40 CFR 411.17 | | | |

Outfalls: 002

| | LOAD LIMITS lbs/day* DAF (DMF) | | | | CONCENTRATION LIMITS mg/L | | | |
|-------------------------|-----------------------------------|-----------------|--------------|------------------------------|--|----------------|--------------------|-------------------------------|
| PARAMETER | Monthly Avg. | Weekly Avg. | Daily Max | REGULATION | Monthly Avg. | Weekly Avg. | Daily Max | REGULATION |
| Flow (MGD) | | | | | Monitor Only | | | |
| pH | | | | | Shall be within the range of 6-9 s.u. | | | 35 IAC 304.125 |
| Total Suspended Solids | 5.5 (7.5)* | 8.26 (11.3)* | | ORSANCO (5.4)(A.)(2.) | 30 | 45 | | ORSANCO (5.4)(A.)(2.) |
| BOD ₅ | 5.5 (7.5)* | 8.26 (11.3)* | | ORSANCO (5.4)(A.)(1.)(i.) | 30 | 45 | | ORSANCO (5.4)(A.)(1.)(i.) |
| Total Residual Chlorine | | | | | | | 0.05 | 40 CFR 125.3 |
| Fecal Coliform | | | | | | | 400 cfu/ 100 mL | 35 IAC 304.121 |
| <i>E. Coli</i> ** | | | | | | | | ORSANCO (5.4)(A.)(4.)(ii.) |

* Load Limits based on design maximum flow shall apply only when flow exceeds the design average flow.

**During the months of April – October the geometric mean of the *E. Coli* bacteria content of effluent samples collected in a 90-day period shall not exceed 130/100 mL, and no more than 25% of the values shall exceed 240/100 mL

Outfalls: 003 and 013

| | LOAD LIMITS lbs/day DAF (DMF) | | | CONCENTRATION LIMITS mg/l | | |
|------------------------|----------------------------------|------------------|------------|---|------------------|----------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Monitor Only | | |
| pH | | | | Shall be within the range of 6 -9 s.u. | | 35 IAC 304.125 and 40 CFR 411 |
| Total Suspended Solids | | | | 15 | 30 | 35 IAC 304.124 |

Outfalls: 005

| | LOAD LIMITS lbs/day DAF (DMF) | | | CONCENTRATION LIMITS mg/l | | |
|------------------------|----------------------------------|------------------|------------|---|------------------|----------------------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Monitor Only | | |
| pH | | | | Shall be within the range of 6 -9 s.u. | | 35 IAC 304.125 and 40 CFR 411 |
| Total Suspended Solids | | | | 15 | 30 | 35 IAC 304.124 |
| Total Dissolved Solids | | | | Monitor Only | | |
| Sulfate | | | | Monitor Only | | |
| Chloride | | | | Monitor Only | | |
| Mercury (total) | | | | Monitor Only | | |

Outfalls: 014

| | LOAD LIMITS lbs/day DAF (DMF) | | | CONCENTRATION LIMITS mg/l | | |
|-------------|----------------------------------|------------------|------------|------------------------------|------------------|----------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION | 30 DAY AVERAGE | DAILY MAXIMUM | REGULATION |
| Flow (MGD) | | | | Monitor Only | | |
| Temperature | | | | Monitor Only | | 35 IAC 309.146 |

Load Limit Calculations:

- A. Load limit calculations for outfall 002 for the following pollutant parameters were based on an average flow of 0.022 MGD and a maximum flow of 0.03 MGD and using the formula of average or maximum flow (MGD) X concentration limit (mg/l) X 8.34 = the average or maximum load limit (lbs/day): BOD₅ and TSS
- B. Production based load limits were calculated by multiplying the effluent limit contained in 40 CFR 411.17 and the projected average daily cement production. Production figures utilized in these calculations for the following subcategories are as follows:

| <u>Subcategory</u> | <u>Production Rate</u> |
|-------------------------------------|--|
| Subpart A - Nonleaching Subcategory | 6,356,164 lbs of cement products /day. |

TSS limits for Outfall A01 were calculated using Federal production based load limits. The following sample calculation shows the methodology utilized to determine production based load limitations:

$$\text{TSS daily max} = 6,356,164 \text{ lbs product/day} \times (0.005 \text{ lbs TSS per } 1000 \text{ lbs product}) = 31.8 \text{ lbs TSS/day}$$

The load limits appearing in the permit will be the more stringent of the State and Federal Guidelines.

The following explain the conditions of the proposed permit:

The special conditions clarify the following: Flow, pH, offensive conditions, monitoring requirements, monitoring location, Discharge Monitoring Report submission, mixing zone restrictions for temperature, operator certification requirements, requirements to maintain a storm water pollution prevention plan (SWPPP), and ORSANCO discharge posting requirements.

NPDES Permit No. IL0004081

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Reissued (NPDES) Permit

Expiration Date:

Issue Date:

Effective Date:

Name and Address of Permittee:

Lafarge Midwest, Inc.
2500 Portland Road
Grand Chain, Illinois 62941

Facility Name and Address:

Lafarge Midwest, Inc.
County Line Roads 1000N and 300E
Joppa, Illinois 62953
(Massac County)

Discharge Number and Name :

Receiving Waters:

| | |
|---|-------------|
| 001 Discharges from Internal Outfall A01, Stormwater, and Storage Pile Runoff | Ohio River |
| A01 Non-contact Cooling Water, Cooling Tower Blowdown, and Equipment Washdown | Outfall 001 |
| 002 Treated Sanitary Wastewater and Air Conditioner Condensate | Ohio River |
| 003 Stormwater and Storage Pile Runoff | Ohio River |
| 005 Stormwater and Storage Pile Runoff | Ohio River |
| 013 Stormwater and Storage Pile Runoff | Ohio River |
| 014 Pump Cooling/Sealant Water | Ohio River |

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Alan Keller, P.E.
Manager, Permit Section
Division of Water Pollution Control

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NPDES Permit No. IL0004081

Effluent Limitations and Monitoring

From the effective date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 - Discharges from Internal Outfall A01, Stormwater and Storage Pile Runoff*
(Intermittent Discharge)

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-------------------------|----------------------------------|------------------|------------------------------|------------------|---------------------|-------------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Month | Measurement |
| pH | See Special Condition 2 | | | | 1/Month | Grab |
| Temperature | See Special Condition 3 | | | | 1/Month | Single Reading |
| Total Suspended Solids | | | 15 | 30 | 1/Month | Grab |
| Total Residual Chlorine | | | | 0.05** | 1/Month | Grab |
| Total Dissolved Solids | | | Monitor Only | | 2/Year*** | Grab |
| Sulfate | | | Monitor Only | | 2/Year*** | Grab |
| Chloride | | | Monitor Only | | 2/Year*** | Grab |

* See Special Condition 8 and 12

** See Special Condition 11

***See Special Condition 13

Outfall(s): A01 - Non-contact Cooling Water, Cooling Tower Blowdown, and Equipment Washdown
(Intermittent Discharge)

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-------------------------|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | | |
| Flow (MGD) | See Special Condition 1 | | | | 1/Month | Measurement |
| Total Suspended Solids* | | 31.8 | | | 1/Month | Calculation |

* See Special Condition 21

Outfall(s): 002 - Treated Sanitary Wastewater and Air Conditioner Condensate
(DAF = 0.022 MGD; DMF = 0.03 MGD)

| PARAMETER | LOAD LIMITS lbs/day DAF (DMF)* | | | CONCENTRATION LIMITS mg/L | | | SAMPLE FREQUENCY | SAMPLE TYPE |
|-------------------------|-----------------------------------|-----------------|--------------|------------------------------|----------------|--------------------|---------------------|----------------|
| | Monthly Avg. | Weekly Avg. | Daily Max | Monthly Avg. | Weekly Avg. | Daily Max | | |
| Flow (MGD) | See Special Condition 1 | | | | | | 1/Month | Measurement |
| pH | See Special Condition 2 | | | | | | 1/Month | Grab |
| Total Suspended Solids | 5.5 (7.5)* | 8.26 (11.3)* | | 30 | 45 | | 1/Month | Grab |
| BOD ₅ | 5.5 (7.5)* | 8.26 (11.3)* | | 30 | 45 | | 1/Month | Grab |
| Total Residual Chlorine | | | | | | 0.05** | 1/Month | Grab |
| Fecal Coliform | See Special Condition 9 | | | | | 400 cfu/ 100 mL | 1/Month | Grab |
| <i>E. Coli</i> | | | | | | | 1/Month | Grab |
| April – October*** | | | | | | | 1/Month | Grab |

* Load Limits based on design maximum flow shall apply only when flow exceeds the design average flow.

** See Special Condition 11

***See Special Condition 18 for *E. Coli* limits.

NPDES Permit No. IL0004081

Effluent Limitations and Monitoring

Outfall(s): 003 and 013 - Stormwater and Storage Pile Runoff*
(DAF = Intermittent Discharge)

| | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | | |
|------------------------|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Flow (MGD) | See Special Condition 1 | | | | 1/Month | Calculation |
| pH | See Special Condition 2 | | | | 1/Month | Grab |
| Total Suspended Solids | | | 15 | 30 | 1/Month | Grab |

*See Special Condition 8 and 12

Outfall(s): 005 - Stormwater and Storage Pile Runoff*
(DAF = Intermittent Discharge)

| | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | | |
|------------------------|----------------------------------|------------------|------------------------------|------------------|---------------------|----------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Flow | See Special Condition 1 | | | | 1/Month | Calculation |
| pH | See Special Condition 2 | | | | 1/Month | Grab |
| Total Suspended Solids | | | 15 | 30 | 1/Month | Grab |
| Total Dissolved Solids | | | Monitor Only | | 2/Year** | Grab |
| Sulfate | | | Monitor Only | | 2/Year** | Grab |
| Chloride | | | Monitor Only | | 2/Year** | Grab |
| Mercury*** | | | Monitor Only | | 2/Year** | Grab |

*See Special Conditions 8 and 12

**See Special Condition 13

***See Special Condition 16

Outfall(s): 014 - Pump Cooling/Sealant Water*
(DAF = 0.216 MGD)

| | LOAD LIMITS lbs/day DAF (DMF) | | CONCENTRATION LIMITS mg/l | | | |
|-------------|----------------------------------|------------------|------------------------------|------------------|---------------------|-------------------|
| PARAMETER | 30 DAY AVERAGE | DAILY MAXIMUM | 30 DAY AVERAGE | DAILY MAXIMUM | SAMPLE FREQUENCY | SAMPLE TYPE |
| Flow | See Special Condition 1 | | | | 1/Month | Calculation |
| Temperature | See Special Condition 3 | | | | 1/Month | Single Reading |

* See Special Conditions 17

NPDES Permit No. IL0004081

Special Conditions

SPECIAL CONDITION 1. Flow shall be measured in units of Million Gallons per Day (MGD) and reported as a monthly average and a daily maximum value on the Discharge Monitoring Report.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

SPECIAL CONDITION 3. This facility meets the allowed mixing criteria for thermal discharges pursuant to 35 IAC 302.102. No reasonable potential exists for the discharge to exceed thermal water quality standards. This determination is based on the combined daily maximum flow of 0.516 MGD from Outfalls 001 and 014 and a maximum temperature of 95.4 degrees Fahrenheit. The permittee shall monitor the flow and temperature of the discharge prior to entry into the receiving water body. Monitoring results shall be reported on the monthly Discharge Monitoring Report. This permit may be modified to include formal temperature limitations should the results of the monitoring show that there is reasonable potential to exceed a thermal water quality standard. Modification of this permit shall follow public notice and opportunity for comment.

There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions. The normal daily and seasonal temperature fluctuations which existed before the addition of heat due to other than natural causes shall be maintained.

The monthly maximum value shall be reported on the DMR form.

SPECIAL CONDITION 4. Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 5. The Permittee shall record monitoring results on Discharge Monitoring Report (DMR) Forms using one such form for each outfall each month.

In the event that an outfall does not discharge during a monthly reporting period, the DMR form shall be submitted with no discharge indicated.

The Permittee may choose to submit electronic DMRs (NetDMRs) instead of mailing paper DMRs to the IEPA. More information, including registration information for the eDMR program, can be obtained on the IEPA website, <http://www.epa.state.il.us/water/net-dmr/index.html>.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 15th day of the following month, unless otherwise specified by the permitting authority.

Permittees not using NetDMRs shall mail Discharge Monitoring Reports with an original signature to the IEPA at the following address:

Illinois Environmental Protection Agency
Division of Water Pollution Control
Attention: Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

SPECIAL CONDITION 6. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

SPECIAL CONDITION 7. This permit does not authorize the use of any water treatment additives other than chlorine, sulfuric acid, and sodium bisulfate. In the event the permittee shall require the use of biocides, corrosion inhibitors, and/or other water treatment additives the permittee shall request a modification of this permit in accordance with the Standard Conditions – Attachment H.

SPECIAL CONDITION 8.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

A. A storm water pollution prevention plan shall be maintained by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit. The permittee shall modify the plan if substantive changes are made or occur affecting compliance with this condition.

1. Waters not classified as impaired pursuant to Section 303(d) of the Clean Water Act.

NPDES Permit No. IL0004081

Special Conditions

Unless otherwise specified by federal regulation, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event.

2. Waters classified as impaired pursuant to Section 303(d) of the Clean Water Act

For any site which discharges directly to an impaired water identified in the Agency's 303(d) listing, and if any parameter in the subject discharge has been identified as the cause of impairment, the storm water pollution prevention plan shall be designed for a storm event equal to or greater than a 25-year 24-hour rainfall event. If required by federal regulations, the storm water pollution prevention plan shall adhere to a more restrictive design criteria.

B. The operator or owner of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

Facilities which discharge to a municipal separate storm sewer system shall also make a copy available to the operator of the municipal system at any reasonable time upon request.

C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.

D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph H of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within 30 days of any proposed construction or operational changes at the facility, and shall be provided to the Agency for review upon request.

E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:

1. A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate. Any map or portion of map may be withheld for security reasons.

2. A site map showing:

- i. The storm water conveyance and discharge structures;
- ii. An outline of the storm water drainage areas for each storm water discharge point;
- iii. Paved areas and buildings;
- iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
- v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
- vi. Surface water locations and/or municipal storm drain locations
- vii. Areas of existing and potential soil erosion;
- viii. Vehicle service areas;
- ix. Material loading, unloading, and access areas.
- x. Areas under items iv and ix above may be withheld from the site for security reasons.

3. A narrative description of the following:

- i. The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;

NPDES Permit No. IL0004081

Special Conditions

- ii. Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
 - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
 - iv. Industrial storm water discharge treatment facilities;
 - v. Methods of onsite storage and disposal of significant materials.
4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities. Also provide a list of any pollutant that is listed as impaired in the most recent 303(d) report.
5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
6. A summary of existing sampling data describing pollutants in storm water discharges.
- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
- 1. Storm Water Pollution Prevention Personnel - Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
 - 2. Preventive Maintenance - Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
 - 3. Good Housekeeping - Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water. Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
 - 4. Spill Prevention and Response - Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill cleanup equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
 - 5. Storm Water Management Practices - Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
 - i. Containment - Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff. To the maximum extent practicable storm water discharged from any area where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water should not enter vegetated areas or surface waters or infiltrate into the soil unless adequate treatment is provided.
 - ii. Oil & Grease Separation - Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges.
 - iii. Debris & Sediment Control - Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges.
 - iv. Waste Chemical Disposal - Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
 - v. Storm Water Diversion - Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination. Minimize the quantity of storm water entering areas where material handling equipment or activities, raw material, intermediate products, final products, waste materials, by-products, or industrial machinery are exposed to storm water using green infrastructure techniques where practicable in the areas outside the exposure area, and otherwise divert storm water away from exposure area.

NPDES Permit No. IL0004081

Special Conditions

vi. Covered Storage or Manufacturing Areas - Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.

vii. Storm Water Reduction - Install vegetation on roofs of buildings within adjacent to the exposure area to detain and evapotranspire runoff where precipitation falling on the roof is not exposed to contaminants, to minimize storm water runoff; capture storm water in devices that minimize the amount of storm water runoff and use this water as appropriate based on quality.

6. Sediment and Erosion Prevention - The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion. The plan shall describe measures to limit erosion.

7. Employee Training - Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.

8. Inspection Procedures - Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.

G. Non-Storm Water Discharge - The plan shall include a certification that the discharge has been tested or evaluated for the presence of non-storm water discharge. The certification shall include a description of any test for the presence of non-storm water discharges, the methods used, the dates of the testing, and any onsite drainage points that were observed during the testing. Any facility that is unable to provide this certification must describe the procedure of any test conducted for the presence of non-storm water discharges, the test results, potential sources of non-storm water discharges to the storm sewer, and why adequate tests for such storm sewers were not feasible.

H. Quarterly Visual Observation of Discharges - The requirements and procedures for quarterly visual observations are applicable to all outfalls covered by this condition.

1. You must perform and document a quarterly visual observation of a storm water discharge associated with industrial activity from each outfall. The visual observation must be made during daylight hours. If no storm event resulted in runoff during daylight hours from the facility during a monitoring quarter, you are excused from the visual observations requirement for that quarter, provided you document in your records that no runoff occurred. You must sign and certify the document.

2. Your visual observation must be made on samples collected as soon as practical, but not to exceed 1 hour or when the runoff or snow melt begins discharging from your facility. All samples must be collected from a storm event discharge that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measureable (greater than 0.1 inch rainfall) storm event. The observation must document: color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution. If visual observations indicate any unnatural color, odor, turbidity, floatable material, oil sheen or other indicators of storm water pollution, the permittee shall obtain a sample and monitor for the parameter or the list of pollutants in Part E.4.

3. You must maintain your visual observation reports onsite with the SWPPP. The report must include the observation date and time, inspection personnel, nature of the discharge (i.e., runoff or snow melt), visual quality of the storm water discharge (including observations of color, odor, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of storm water pollution), and probable sources of any observed storm water contamination.

4. You may exercise a waiver of the visual observation requirement at a facility that is inactive or unstaffed, as long as there are no industrial materials or activities exposed to storm water. If you exercise this waiver, you must maintain a certification with your SWPPP stating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to storm water.

5. Representative Outfalls - If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and storm water management practices occurring within the drainage areas of the outfalls, you may conduct visual observations of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s).

6. The visual observation documentation shall be made available to the Agency and general public upon written request.

I. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.

NPDES Permit No. IL0004081

Special Conditions

J. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated there under, and Best Management Programs under 40 CFR 125.100.

K. The plan is considered a report that shall be available to the public at any reasonable time upon request.

L. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

M. Facilities which discharge storm water associated with industrial activity to municipal separate storm sewers may also be subject to additional requirement imposed by the operator of the municipal system

Construction Authorization

Authorization is hereby granted to construct treatment works and related equipment that may be required by the Storm Water Pollution Prevention Plan developed pursuant to this permit.

This Authorization is issued subject to the following condition(s).

N. If any statement or representation is found to be incorrect, this authorization may be revoked and the permittee there upon waives all rights there under.

O. The issuance of this authorization (a) does not release the permittee from any liability for damage to persons or property caused by or resulting from the installation, maintenance or operation of the proposed facilities; (b) does not take into consideration the structural stability of any units or part of this project; and (c) does not release the permittee from compliance with other applicable statutes of the State of Illinois, or other applicable local law, regulations or ordinances.

P. Plans and specifications of all treatment equipment being included as part of the stormwater management practice shall be included in the SWPPP.

Q. Construction activities which result from treatment equipment installation, including clearing, grading and excavation activities which result in the disturbance of one acre or more of land area, are not covered by this authorization. The permittee shall contact the IEPA regarding the required permit(s).

REPORTING

R. The facility shall submit an electronic copy of the annual inspection report to the Illinois Environmental Protection Agency at epa.npdes.inspection@illinois.gov. The report shall include results of the annual facility inspection which is required by Part I of this condition. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s). The annual inspection report is considered a public document that shall be available at any reasonable time upon request.

S. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.

T. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

U. The permittee shall retain the annual inspection report on file at least 3 years. This period may be extended by request of the Illinois Environmental Protection Agency at any time.

Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section
Annual Inspection Report
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

NPDES Permit No. IL0004081

Special Conditions

V. The permittee shall notify any regulated small municipal separate storm sewer owner (MS4 Community) that they maintain coverage under an individual NPDES permit. The permittee shall submit any SWPPP or any annual inspection to the MS4 community upon request by the MS4 community.

SPECIAL CONDITION 9. The daily maximum fecal coliform count shall not exceed 400 per 100 mL.

SPECIAL CONDITION 10. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(c) and (d), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

SPECIAL CONDITION 11. All samples for Total Residual Chlorine shall be analyzed by an applicable method contained in 40 CFR 136, equivalent in accuracy to low-level amperometric titration. Any analytical variability of the method used shall be considered when determining the accuracy and precision of the results obtained. For the purpose of this permit Total Residual Chlorine means those substances which include combined and uncombined forms of both chlorine and bromine and which are expressed, by convention, as an equivalent concentration of molecular chlorine.

The water quality standard for TRC (0.011 mg/l 30-day average and 0.019 mg/l daily max) is below the method detection level (0.05 mg/l) as described in 40 CFR 136. Therefore, for the purpose of this permit, the method detection level will be utilized to determine compliance with the permit limit for TRC. A measurement of <0.05 mg/l reported on the DMR shall not be considered a violation of the water quality based effluent limit. This reporting threshold is being established to determine compliance and does not authorize the discharge of TRC in excess of the water quality based effluent limit.

SPECIAL CONDITION 12.

The Permittee shall conduct semi-annual monitoring of the effluents from Outfall 001, Outfall 003, Outfall 005, and Outfall 013 and report concentrations (in mg/l) of the following listed parameters. Parameters noted on pages 2 and 3 of this permit that are also noted below are only shown to clarify the minimum reporting level. Monitoring shall begin three (3) months from the effective date of this permit. The sample shall be a 24-hour effluent composite except as otherwise specifically provided below and the results shall be submitted on Discharge Monitoring Report Forms to IEPA unless otherwise specified by the IEPA. The parameters to be sampled and the minimum reporting limits to be attained are as follows:

| <u>STORET CODE</u> | <u>PARAMETER</u> | <u>Minimum reporting limit</u> |
|------------------------|---|------------------------------------|
| 01002 | Arsenic | 0.05 mg/L |
| 01007 | Barium | 0.5 mg/L |
| 01027 | Cadmium | 0.001 mg/L |
| 01032 | Chromium (hexavalent) (grab) | 0.01 mg/L |
| 01034 | Chromium (total) | 0.05 mg/L |
| 01042 | Copper | 0.005 mg/L |
| 00718 | Cyanide (grab (available *** or amenable to chlorination) | 5.0 ug/L |
| 00720 | Cyanide (total) (grab not to exceed 24 hours) | 5.0 ug/L |
| 00951 | Fluoride | 0.1 mg/L |
| 01045 | Iron (total) | 0.5 mg/L |
| 01046 | Iron (Dissolved) | 0.5 mg/L |
| 01051 | Lead | 0.05 mg/L |
| 01055 | Manganese | 0.5 mg/L |
| 71900 | Mercury (grab)** | 1.0 ng/L* |
| 01067 | Nickel | 0.005 mg/L |
| 00556 | Oil (hexane soluble or equivalent) (Grab Sample only) | 5.0 mg/L |
| 32730 | Phenols (grab) | 0.005 mg/L |
| 01147 | Selenium | 0.005 mg/L |
| 01077 | Silver (total) | 0.003 mg/L |
| 01092 | Zinc | 0.025 mg/L |

Unless otherwise indicated, concentrations refer to the total amount of the constituent present in all phases, whether solid, suspended or dissolved, elemental or combined, including all oxidation states.

*1.0 ng/L = 1 part per trillion.

**Utilize USEPA Method 1631E and the digestion procedure described in Section 11.1.1.2 of 1631E.

***USEPA Method OIA-1677.

NPDES Permit No. IL0004081

Special Conditions

The sample shall be an effluent composite except as otherwise specifically provided above. Samples shall be collected from the discharge resulting from a rainfall event that is greater than 0.1 inches in magnitude or equivalent snow melt and occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall or equivalent snow melt) storm event.

For discharges from holding ponds or other impoundments with a retention period greater than 24 hours, a minimum of one grab sample may be taken and analyzed. For all other discharges, a grab sample shall be taken during the first thirty minutes of the discharge and a minimum of three sample aliquots taken in each hour of the discharge for the entire discharge or the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes. The grab sample taken during the initial thirty minutes of discharge shall be analyzed separately and the remaining sample aliquots may be combined to form a single sample for analysis.

SPECIAL CONDITION 13. Semi-annual sampling shall be conducted once during the months of January – May and once during the months of June – November. Results of the semi-annual sampling shall be submitted with the June and December DMR's each year.

SPECIAL CONDITION 14. In addition to the other requirements of this permit, no effluent shall contain settleable solids, floating debris, visible oil and grease, scum, or sludge solids. Color, odor, and turbidity shall be reduced to below obvious levels.

SPECIAL CONDITION 15. The effluent, alone or in combination with other sources, shall not cause a violation of any applicable water quality standard outlined in 35 Ill. Adm. Code 302 or in the most recent revision to the *Ohio River Valley Water Sanitation Commission Water Quality Standards for Discharges to the Ohio River*.

SPECIAL CONDITION 16. All samples for mercury shall be analyzed using USEPA Method 1631E or another equivalent method.

SPECIAL CONDITION 17. Any debris or solids collected on the barge unloader vacuum pump's cooling water intake shall be removed and disposed of in a manner acceptable to the Agency.

SPECIAL CONDITION 18. During the months of April – October the geometric mean of the *E. Coli* bacteria content of effluent samples collected in a 90-day period shall not exceed 130/100 mL, and no more than 25% of the values shall exceed 240/100 mL.

SPECIAL CONDITION 19. The Permittee shall post notice pursuant to the requirements of the Ohio River Valley Water Sanitation Commission (ORSANCO) Pollution Control Standards, Section V., Chapter 5.1(B). As soon as practical, but in no case longer than twelve (12) months from the effective date of this Permit, the Permittee shall comply with these requirements as follows:

- a. A marker shall be posted on the stream bank at each outfall discharging directly to the Ohio River
- b. The marker shall consist at a minimum of the facility name for this Permit, the permit number, and the outfall number. The information shall be printed in letters not less than two (2) inches in height.
- c. The marker shall be a minimum of two (2) feet by two (2) feet and shall be a minimum of three (3) feet off the ground.

Questions regarding this Special Condition should be directed to:

ORSANCO
5735 Kellogg Avenue
Cincinnati, Ohio 45228-1112

Phone: 513/231-7719
FAX: 513/231-7761

Within fourteen (14) days of posting such sign, the Permittee shall notify the IEPA and ORSANCO in writing at the following addresses:

Illinois Environmental Protection Agency
Bureau of Water
Compliance Assurance Section, Mail Code #19
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276

ORSANCO
ATTN: Permits
5735 Kellogg Avenue
Cincinnati, Ohio 45228-1112

SPECIAL CONDITION 20. The permittee shall notify Ohio River Valley Water Sanitation Commission of all upsets and bypasses within two hours of their discovery.

NPDES Permit No. IL0004081

Special Conditions

SPECIAL CONDITION 21. Samples taken in compliance with the effluent monitoring requirements for Outfalls A01 shall consist of a grab sample collected from each of the process waste streams (i.e. discharges of non-contact cooling water, cooling tower blowdown, and equipment wash water) prior to commingling with any other non-process waste streams. The value reported on the monthly DMR shall be the sum total of flow and TSS mass contributions from each of the process waste streams.

